

Out o

By Michael Brayshaw, Norfolk Naval Shipyard

t all started like any usual Monday morning for three lifting and handling employees. Mechanical equipment specialist Larry Cahoon and electrical equipment specialists Lisa Tholen and Ralph LaClair had to do an annual inspection on jib crane No. 156. This type of crane has horizontal arms, on which trolleys move, bearing the load—nothing new for the employees. In fact, the task had become such a basic practice it seemed like they had nothing to look out for at first.

When the three arrived at the job site, they completed an operational check of the crane before lowering its hook so Cahoon could inspect it and the chain. While he was doing this inspection, Tholen and LaClair de-energized the main-power disconnect and installed both the group-lockout device and their individual safety locks on the crane-door latch. These actions secured power to the crane.

There was just one problem: They should have installed the group-lockout device on the locking

mechanism for the disconnect handle, instead of the door latch. They compounded that problem by not doing an initial voltage check, known as a frisk, to confirm power isolation.

With the hook and pendant-controller inspections done by 8:20, Tholen and LaClair removed their individual locks and energized the main-power disconnect, allowing the crane's hook to be raised back to its upper limit. Tholen then left the area with Cahoon to secure power to the hot rails feeding two bridge cranes they initially were assigned to inspect, located directly above the jib crane. After de-energizing the disconnect for the bridge cranes, they installed their individual safety locks in the proper location but again didn't perform the initial voltage check.

Between 8:20 and 8:25, LaClair repositioned the trolley on the jib crane, making it easier to inspect the trolley hot rails. He again mistakenly installed the group-lockout device and individual safety lock on the door latch of the main-power disconnect for the crane.

He also again failed to do the initial voltage check.

About 8:25, Tholen and Cahoon placed their own individual safety locks on the grouplockout device installed on the main-power disconnect for the jib crane. Neither employee verified that the disconnect had been deenergized, or that the group-lockout device was installed in the proper location.

About 8:30, all three workers went



f Complacency



up in the aerial platform to continue the inspection of the jib crane. Fifteen minutes later, Tholen removed a cover to inspect the trolley festoon car. The cover touched the hot rails, shocking her.

"It jolted me; I jumped back, looked at the two of them, and said, 'I got shocked!'" Tholen said, remembering the experience at a conference table 11 days later. At the table with her were Cahoon; LaClair; Billy Mutter, NNSY safety manager; and Tim Blanton, lifting and handling director. Rather than being chided, the three employees were being commended for their honesty about the situation.

"I've always made it a point to tell people who work with me that 'as long as you're up front and straightforward about what happened, then we're doing the right thing," said Blanton. "We're all human, we all make mistakes, and, in this instance, we turned out lucky—very, very lucky."

All three equipment specialists agreed that complacency is the biggest enemy of an electrician. "This is how close death is to you if you don't concentrate and do your job," said LaClair.

Cahoon mentioned that, after the incident, some employees tried to kid around with him about what had happened. "I told them, 'Man, this isn't a joke. Somebody could have gotten killed."

"When you really look at complacency on the job," said Mutter, "it can affect more than just a person's health. It also affects our workmanship and the quality of our products. But, the ultimate failure that can occur is for a life to be lost." Rather than blaming any one person for such a mishap, Mutter said employees should take a long look in the mirror... "We all measure risk in a different way," he noted. "When we fail to exercise the principles of operational risk management, our people and our products suffer."

As Cahoon explained, the group-locking device, called a tree, needs to be locked—confirmed, if you will, by all employees working a particular project. "If you have six people working on a component, and five of them go home before the job is done, then you're still going to be stuck there," he said. To be sure, it's a safeguard designed to protect individuals; if followed, the lockout process ensures control and protection for each employee. And, just as crane shutdowns require both individual and group lockouts, it seems particularly fitting that almost a year ago when the "voluntary protection program" was launched at the shipyard, it emphasized both individual and group safety.

"If Lisa had gotten killed, I wouldn't have felt any better thinking that everyone is responsible for his/ her own safety," said LaClair. "Even if she was wrong and had died, I still would have blamed myself. You couldn't have told me any different."

The memory of the mishap weighs heavily on LaClair. Despite many years of experience as an



electrician at the shipyard, as well as in the Navy, he allowed himself to take something for granted that Monday morning. "I hung the tree in the wrong place," he said. "For whatever reason, I don't know why, complacency was a factor in what I did. That's why it's so important to focus on your job when you're here—not to mix personal with professional," he added. "It's not an easy thing to do, but you have to leave some things behind at the shipyard gates."

Among Tholen's memories of her experience is that, even though she left the hospital that same afternoon with no injury, she still was worried something residual might happen to her. Once home, she had to face her 14-year-old daughter, who was furious. "What are you trying to do—kill yourself and make me an orphan?" the daughter asked.

"My 17-year-old son even asked me to sign a letter, saying I would take care of myself at work every day so that I could get home and take care of his sister and him," said Tholen. "The piece of paper he brought me to sign said, 'Be there, and take care of yourself because we need you."

For days afterward, Tholen's son uncharacteristically stayed home in the afternoons just so he could call his mother at work. "He would ask, 'What are you doing, Mom? Are you being safe?" she said.

"I'd reply, 'Yeah, I'm being safe. I'm in the office right now; I'm not doing an inspection."

"He would conclude, 'Good. You need to be grounded."

The author is a public affairs specialist at NNSY. A similar version of this story first appeared in the July 2, 2004, issue of "Service to the Fleet," the official publication of Norfolk Naval Shipyard.

To learn more about the OSHA voluntary protection program, go to http://www.osha.gov/dcsp/vpp/.

Unlike the afloat tagout program, where paper tags are used to tag out hazards, the Military Sealift Command and NavSea shipyards follow OSHA maritime standards, where locks are used to physically "lock out" a source of energy. To learn more about OSHA's lockout/tagout requirements, go to http://www.osha.gov/SLTC/controlhazardousenergy/.